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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER NGUYEN, MINH DIEU T				
ART UNIT		PAPER NUMBER		
2137				

DATE MAILED: 11/16/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/853,395

Applicant(s)

STRONGIN ET AL.

Examiner

Minh Dieu Nguyen

Art Unit

2137

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-79 is/are pending in the application.
- 4a) Of the above claim(s) 33-58 and 72-79 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 and 59-71 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 33-58 and 72-79 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-32 and 59-71, drawn to system, method and computer readable program for requesting memory transaction for a storage location in the storage device, classified in class 711, subclass 163.
 - II. Claims 33-58 and 72-79, drawn to system, method and computer readable program for granting access to storage device, classified in class 713, subclass 200.
2. Inventions i and ii are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because group I does not require device access authorization. The subcombination has separate utility such as memory transaction.
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

4. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

6. During a telephone conversation with Mark Sincell on November 5, 2004 a provisional election was made without traverse to prosecute the invention of group I, claims 1-32 and 59-71. Affirmation of this election must be made by applicant in replying to this Office action. Claims 33-58 and 72-79 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 5 and 18-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a) As to claim 5, "the device" lacks antecedent basis.

b) As to claims 18-19, "standard mapping" and "non-standard mapping" are vague, not defined in the specifications.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. **Claims 1-3, 20-22, 26, 59-61 and 65** are rejected under 35 U.S.C. 102(b) as being anticipated by Brant et al. (5,848,435).

a) As to claims 1, 20 and 59, Brant discloses a system and method for preventing access to unauthorized address rangers comprising a processor (Fig. 1, element 7) and a memory (Fig. 1, element 3; col. 2, lines 28-32) coupled to receive memory transactions through the crypto-processor, wherein it is determined if the memory transactions is authorized for the storage location and the memory transaction request are passed to the memory by the crypto-processor if the memory transaction is authorized for the storage location (col. 3, lines 45-62).

b) As to claims 2-3, 21-22, 26, 60-61 and 65, Brant discloses the crypto-processor includes a memory permission table (col. 2, lines 49-50; Fig. 3) that maps at least a portion of the memory (col. 5, lines 65-67 to col. 6, lines 10) and wherein the crypto-processor is configured to pass the memory transactions to the memory if and only if the memory access is indicated as allowed by the memory permission table (col. 2, lines 50-56; col. 6, lines 38-65).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. **Claims 4, 6-17, 27-32 and 66-71** are rejected under 35 U.S.C. 103(a) as being unpatentable over Brant et al. (5,848,435) in view of Baird, III et al. (6,732,278).

a) As to claims 4, 29 and 68, Brant does not disclose a device different from the crypto-processor wherein the device is configured to request the memory transactions passed to the memory by the crypto-processor.

Baird discloses an apparatus and method for providing access to a resource such as computers, applications and data through an authentication process during which a user password and biometrics are provided to the device comprising biometric device (Fig. 3, element 310).

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of biometric device as Baird teaches, in the system of Brant to protect computer resources.

b) As to claims 6, 30 and 69, Brant does not disclose the crypto-processor includes a secret.

Baird discloses an apparatus and method for authenticating access to a network resources comprising the crypto-processor includes a secret, wherein the authorization comprises an indication from the device of the secret (Fig. 7, element 607).

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of a secret as Baird teaches, in the system of Brant so as to provide secure access to resource.

c) As to claims 7, 31 and 70, Baird discloses the system wherein the indication of the secret comprises a correct response to a challenge-response authentication (Fig. 7, element 607).

d) As to claims 8-10, 27-28 and 66-67, Baird discloses the system wherein the memory comprises a ROM, BIOS ROM, flash memory (col. 5, lines 54-58).

e) As to claims 11, 14, 32 and 71, Brant discloses the protected storage device comprising one or more storage areas (Fig. 1, elements 5&6), logic for controlling access to the one or more storage areas (Fig. 1, element 7), wherein the method further comprising receiving the request, verifying the authorization using the logic and the secret, and passing the request for the memory transaction an appropriate one of the one or more storage areas. However Brant does not disclose a random number generator and a secret, Brant discloses verifying the authorization using the logic, not the secrete.

Baird discloses a random number generator (col. 10, lines 16-29) and a secret (see addressed claim 6) and verifying the authorization using the secret (Abstract).

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of a random number generator as Baird teaches, in the system of Brant so as to provide secure access to resource.

f) As to claims 12 and 15, Baird discloses the system wherein the one or more storage areas comprises a data storage and a code storage (col. 5 , lines 61-62).

g) As to claims 13 and 16-17, Baird discloses the system wherein the secret is comprised within the code storage and wherein the memory further includes a secret (Fig. 4).

13. **Claims 5, 25 and 64** are rejected under 35 U.S.C. 103(a) as being unpatentable over Brant et al. (5,848,435) in view of Baird, III et al. (6,732,278) and further in view of Brock et al. (6,662,251).

As to claims 5, 25 and 64, as best understood, Brant and Baird do not explicitly disclose the system further comprising a bridge, first and second bus.

Brock discloses a system in which transactions on a shared bus are delivered to selected targets on the bus comprising a bridge (Fig. 1, element 106), a first bus (Fig. 1, element 107) coupled between the device (Fig. 1, element 108) and the bridge, and a second bus (Fig. 1, element 103) coupled between the bridge and the crypto-processor wherein transmitting the request for the memory transaction for the storage location in the storage device further comprising transmitting the request for the memory transactions for the storage location in the storage device over the first bus and transmitting the request for the memory transaction for the storage location in the storage device over the second bus.

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of computer system architecture with bridge and buses to

couple biometric device as Brock teaches, in the system of Brant and Baird to protect computer resources.

14. **Claims 18-19, 23-24 and 62-63**, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Brant et al. (5,848,435) in view of Hubis et al. (6,343,324).

Brant discloses the system wherein the memory comprises memory locations and wherein the crypto-processor includes a memory permission table that maps at least a portion of the memory and the crypto-processor configured to pass memory transactions to the memory (Figs. 1&3). However, Brant does not disclose the crypto-processor transiate between a standard mapping and non-standard mapping and receives memory transaction results from the memory in the non-standard mapping and to convert the non-standard mapping to the standard mapping.

Hubis discloses a system and method for controlling access share storage devices in a network environment by configuring host to volume mapping data structures in the controller memory for granting and denying access to the devices comprising host to volume mapping process (Fig. 2; col. 9, lines 58-67 to col. 10, lines 1-7).

Conclusion

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Dieu Nguyen whose telephone number is 571-272-3873. The examiner can normally be reached on M-F 6:00-2:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on 571-272-3868. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

Minh Dieu Nguyen
Examiner
Art Unit 2137

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mdn
11/15/04

Andrew Caldwell
Andrew Caldwell